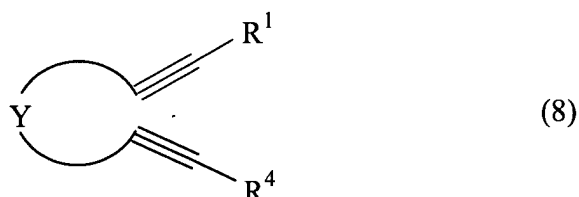


AMENDMENTS TO THE CLAIMS

1. (Original) A process for producing an organotitanium compound which comprises reacting an acetylene compound represented by the formula (8) below in the presence of a titanium compound represented by the formula (2) below and a Grignard reagent represented by the formula (3) below with a compound represented by the formula (5) below, thereby giving said titanium compound represented by the formula (9) and/or (10) below



where R¹ denotes a C₁₋₂₀ alkyl group {which may be substituted with a C₁₋₆ alkoxy group (which may be substituted with a phenyl group) or OSiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ denote mutually independently a C₁₋₆ alkyl group or phenyl group)}, C₃₋₂₀ alkenyl group, C₁₋₆ alkoxy group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆-alkylaminocarbonyl group, phenyl group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylaminocarbonyl group, or di-C₁₋₆-alkylaminocarbonyl group), furyl group, amino group, SiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above), or SnR¹⁰R¹¹R¹² (where R¹⁰, R¹¹, and R¹² denote mutually independently a halogen atom, C₁₋₆ alkyl group, or phenyl group); R⁴ denotes a hydrogen atom, C₁₋₂₀ alkyl group, C₁₋₆ alkoxy group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆-alkylaminocarbonyl group, phenyl group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylaminocarbonyl group, or di-C₁₋₆-alkylaminocarbonyl group), furyl group, amino group,

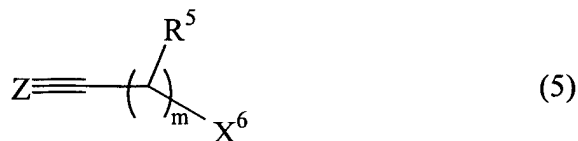
SiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above), or SnR¹⁰R¹¹R¹² (where R¹⁰, R¹¹, and R¹² are defined as above); and Y denotes Z¹-Z²-Z³ or Z⁴-Z⁵-Z⁶-Z⁷ {where Z¹, Z³, Z⁴, Z⁵, and Z⁷ denote mutually independently C=O or CR¹⁴R¹⁵ (where R¹⁴ and R¹⁵ denote mutually independently a hydrogen atom or C₁₋₆ alkyl group (which may be substituted with a C₁₋₆ alkoxy group (which may be substituted with a phenyl group) or OSiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above))), Z² and Z⁶ denote mutually independently O, S, C=O, NR¹⁶ (where R¹⁶ denotes a C₁₋₆ alkyl group (which may be substituted with a C₁₋₆ alkoxy group (which may be substituted with a C₁₋₆ alkoxy group (which may be substituted with a phenyl group) or OSiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above))), or CR^{14'}R^{15'} (where R^{14'} and R^{15'} denote mutually independently a hydrogen atom or C₁₋₆ alkyl group (which may be substituted with a C₁₋₆ alkoxy group (which may be substituted with a phenyl group) or OSiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above))))}



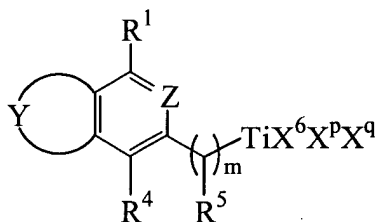
where X¹, X², X³, and X⁴ denote mutually independently a halogen atom, C₁₋₆ alkoxy group {which may be substituted with a phenyl group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, or phenyl group)}, phenoxy group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, or phenyl group), or naphthoxy group



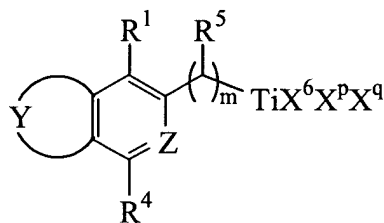
where R denotes a C₂₋₈ alkyl group having a hydrogen atom at the β position, and X⁵ denotes a halogen atom



where R^5 denotes a hydrogen atom, C_{1-20} alkyl group, or phenyl group (which may be substituted with a C_{1-6} alkyl group, C_{1-6} alkoxy group, C_{1-6} alkoxycarbonyl group, C_{1-6} alkylaminocarbonyl group, or di- C_{1-6} -alkylaminocarbonyl group), Z denotes CR' (where R' denotes a hydrogen atom or C_{1-20} alkyl group) or a nitrogen atom; X^6 denotes a halogen atom, C_{1-6} alkoxy group {which may be substituted with a phenyl group (which may be substituted with a C_{1-6} alkyl group, C_{1-6} alkoxy group, and phenyl group), or naphthyl group}, phenoxy group (which may be substituted with a C_{1-6} alkyl group, C_{1-6} alkoxy group, or phenyl group), naphthoxy group, SO_nR^6 {where R^6 denotes a C_{1-6} alkyl group or phenyl group (which may be substituted with a halogen atom or C_{1-6} alkyl group) and n denotes 1 or 2}, OSO_2R^6 (where R^6 is defined as above), or $\text{OP}(\text{O})(\text{OR}^{13})_2$ group (where R^{13} denotes a C_{1-6} alkyl group); and m denotes 0 or 1



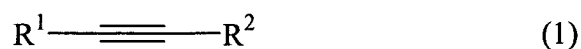
(9)



(10)

where R^1 , R^4 , R^5 , Y , Z , X^6 , and m are defined as above; and X^p and X^q denote any of $\text{X}^1 \sim \text{X}^4$ (which are defined as above).

2. (Original) A process for producing an organotitanium compound which comprises reacting an acetylene compound represented by the formula (1) below in the presence of a titanium compound represented by the formula (2) below and a Grignard reagent represented by the formula (3) below with a compound represented by the formula (11) below, thereby giving said titanium compound represented by the formula (12) below



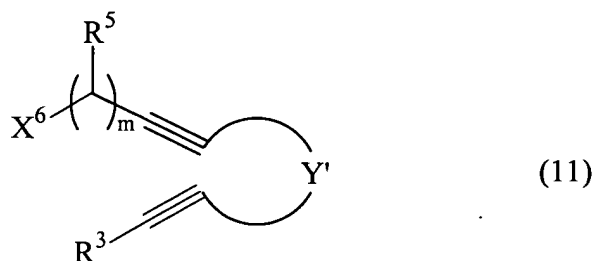
where R^1 and R^2 denote mutually independently a C_{1-20} alkyl group {which may be substituted with a C_{1-6} alkoxy group (which may be substituted with a phenyl group) or $OSiR^7R^8R^9$ (where R^7 , R^8 , and R^9 denote mutually independently a C_{1-6} alkyl group or phenyl group)}, C_{3-20} alkenyl group, C_{1-6} alkoxy group, C_{1-6} alkoxycarbonyl group, C_{1-6} alkylaminocarbonyl group, di- C_{1-6} -alkylaminocarbonyl group, phenyl group (which may be substituted with a C_{1-6} alkyl group, C_{1-6} alkoxy group, C_{1-6} alkoxycarbonyl group, C_{1-6} alkylaminocarbonyl group, or di- C_{1-6} -alkylaminocarbonyl group), furyl group, amino group, $SiR^7R^8R^9$ (where R^7 , R^8 , and R^9 are defined as above), or $SnR^{10}R^{11}R^{12}$ (where R^{10} , R^{11} , and R^{12} denote mutually independently a halogen atom, C_{1-6} alkyl group, or phenyl group)



where X^1 , X^2 , X^3 , and X^4 denote mutually independently a halogen atom, C_{1-6} alkoxy group {which may be substituted with a phenyl group (which may be substituted with a C_{1-6} alkyl group, C_{1-6} alkoxy group, or phenyl group), or a naphthyl group}, phenoxy group (which may be substituted with a C_{1-6} alkyl group, C_{1-6} alkoxy group, or phenyl group), or naphthoxy group

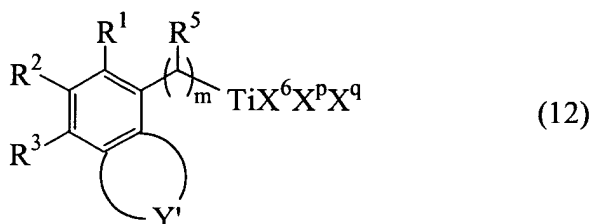


where R denotes a C₂₋₈ alkyl group having a hydrogen atom at the β position, and X⁵ denotes a halogen atom



where R³ denotes a hydrogen atom, C₁₋₂₀ alkyl group, C₁₋₆ alkoxy group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylaminocarbonyl group, di-C₁₋₆-alkylaminocarbonyl group, phenyl group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylaminocarbonyl group, or di-C₁₋₆-alkylaminocarbonyl group), furyl group, amino group, SiR⁷R⁸R⁹ (R⁷, R⁸, and R⁹ are defined as above), or SnR¹⁰R¹¹R¹² (where R¹⁰, R¹¹, and R¹² are defined as above); R⁵ denotes a hydrogen atom, C₁₋₂₀ alkyl group, or phenyl group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, C₁₋₆ alkoxycarbonyl group, C₁₋₆ alkylaminocarbonyl group, or di-C₁₋₆-alkylaminocarbonyl group); Y' denotes Z¹-Z²-Z³ or Z⁴-Z⁵-Z⁶-Z⁷ {where Z¹, Z³, Z⁴, Z⁵, and Z⁷ denote mutually independently C=O or CR¹⁴R¹⁵ (where R¹⁴ and R¹⁵ denote mutually independently a hydrogen atom or C₁₋₆ alkyl group (which may be substituted with a C₁₋₆ alkoxy group (which may be substituted with a phenyl group) or OSiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above))), Z² and Z⁶ denote mutually

independently O, S, C=O, NR¹⁶ (where R¹⁶ denotes a C₁₋₆ alkyl group (which may be substituted with C₁₋₆ alkoxy group (which may be substituted with a phenyl group)) or OSiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above)), or CR^{14'}R^{15'} (where R^{14'} and R^{15'} denote mutually independently a hydrogen atom, C₁₋₆ alkyl group (which may be substituted with a C₁₋₆ alkoxy group (which may be substituted with a phenyl group) or OSiR⁷R⁸R⁹ (where R⁷, R⁸, and R⁹ are defined as above)))); X⁶ denotes a halogen atom, C₁₋₆ alkoxy group {which may be substituted with a phenyl group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, or phenyl group), or naphthyl group}, phenoxy group (which may be substituted with a C₁₋₆ alkyl group, C₁₋₆ alkoxy group, or phenyl group), naphthoxy group, SO_nR⁶ {where R⁶ denotes a C₁₋₆ alkyl group or phenyl group (which may be substituted with a halogen atom or C₁₋₆ alkyl group), and n denotes 1 or 2}, OSO₂R⁶ (where R⁶ is defined as above), or OP(O)(OR¹³)₂ group (where R¹³ denotes a C₁₋₆ alkyl group); and m denotes 0 or 1



where R¹ to R³, R⁵, Y', X⁶, and m are defined as above; and X^p and X^q denote any of X¹ ~ X⁴ (which are defined as above).

3. (Cancelled)

4. (Currently Amended) A process for producing an organotitanium compound as defined in ~~any of Claims 1 to 3~~ Claim 1 or 2, wherein the titanium compound is tetra-i-propoxytitanium.

5. (Currently Amended) A process for producing an organotitanium compound as defined in ~~any of Claims 1 to 3~~ Claim 1 or 2, wherein the Grignard reagent is an i-propyl Grignard reagent.

6. (Currently Amended) A process for addition reaction which comprises adding to the organotitanium compound obtained by the process defined in ~~any of Claims 1 to 3~~ Claim 1 or 2 a compound having an aldehyde group, ketone group, imino group, aliphatic double bond, aliphatic triple bond, acyl group or ester group or an electrophilic reagent of water, heavy water, iodine or oxygen, and performing addition reaction on the organotitanium compound to produce a ~~polysubstituted benzene or polysubstituted pyridine~~ fused bicyclic compound containing a benzene or a pyridine ring as one of the fused rings.